APPENDIX NIM
(NETWORK INTERCONNECTION METHODS)

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APPENDIX NIM
(NETWORK INTERCONNECTION METHODS)

1. INTRODUCTION

1.1 This Appendix sets forth the terms and conditions that Network Interconnection Methods (NIM) is provided by the applicable SBC Communications Inc. (SBC) owned Incumbent Local Exchange Carrier (ILEC) and CLEC. This Appendix describes the physical architecture for Interconnection of the Parties' facilities and equipment for the transmission and routing of Telephone Exchange Service traffic and Exchange Access traffic between the respective Customers of the Parties pursuant to Section 251(c)(2) of the Act; provided, however, Interconnection may not be used solely for the purpose of originating a Party's own interexchange traffic.

1.2 SBC Communications Inc. (SBC) means the holding company which owns the following ILECs: Illinois Bell Telephone Company, Indiana Bell Telephone Company Incorporated, Michigan Bell Telephone Company, Nevada Bell Telephone Company, The Ohio Bell Telephone Company, Pacific Bell Telephone Company, The Southern New England Telephone Company, Southwestern Bell Telephone Company and/or Wisconsin Bell, Inc. d/b/a Ameritech Wisconsin.

1.3 **SBC-13 STATE** - As used herein, **SBC-13 STATE** means the above listed ILECs doing business in Missouri, Kansas, Arkansas, Oklahoma, Texas, California, Connecticut, Nevada, Illinois, Indiana, Michigan, Ohio and Wisconsin.

1.4 **SBC-SWBT** - As used herein, **SBC-SWBT** means the above listed ILEC doing business in Missouri, Kansas, Arkansas, Oklahoma, and Texas.

1.5 **PACIFIC** - As used herein, **PACIFIC** means the above listed ILEC doing business in California.

1.6 **NEVADA** - As used herein, **NEVADA** means the above listed ILEC doing business in Nevada.

1.7 **SNET** - As used herein, **SNET** means the above listed ILEC doing business in Connecticut.

1.8 **SBC-AMERITECH** - As used herein, **SBC-AMERITECH** means the above listed ILECS doing business in Illinois, Indiana, Michigan, Ohio and Wisconsin.

1.9 Network Interconnection Methods (NIMs) include, but are not limited to, Physical Collocation Interconnection; Virtual Collocation Interconnection; Leased Facilities

Interconnection; Fiber Meet Interconnection; and other methods as mutually agreed to by the Parties. One or more of these methods may be used to effect the Interconnection.

1.9.1 Trunking requirements associated with Interconnection are contained in Appendix ITR.

1.9.2 The terms and conditions associated with access to Unbundled Network Elements (UNEs) are not found in Appendix NIM, but are contained in Appendix UNE. **SNET** Unbundled Network Elements are offered via the Connecticut Access Tariff.

1.10 **SBC-13STATE** shall provide Interconnection for CLEC's facilities and equipment for the transmission and routing of telephone exchange service and exchange access, at a level of quality that is equal to that which **SBC-13STATE** provides itself, a subsidiary, an affiliate, or any other party to which **SBC-13STATE** provides Interconnection and on rates, terms and conditions that are just, reasonable and non-discriminatory.

1.11 The Parties shall effect an Interconnection that is efficient, fair and equitable with each party being financially responsible for approximately half of the Interconnection facilities or in any other manner that is mutually agreeable to the Parties.

2. NETWORK INTERCONNECTION ARCHITECTURE PLAN

2.1 **SBC-13STATE**'s network is partly comprised of End Office switches, Tandem switches that serve local only traffic (**SBC-SWBT**), Tandem switches that serve IntraLATA and InterLATA traffic, and Tandem switches that serve a combination of local, IntraLATA and InterLATA traffic. **SBC-13STATE**'s network architecture in any given local exchange area and/or LATA can vary markedly from another local exchange area/LATA. Using one or more of the NIMs herein, the Parties will agree to a physical architecture plan for a specific Interconnection area. Due to differing state regulatory calling scope requirements, **SBC-SWBT** requires Interconnection in each local exchange area, while **SNET**, **PACIFIC, NEVADA** and **SBC-AMERITECH** require Interconnection at all Tandems in a LATA. CLEC and **SBC-13STATE** agree to Interconnect their networks through existing and/or new Interconnection facilities between CLEC switch(es) and **SBC-13STATE** End Office(s) and/or Tandem switch(es). The physical architecture plan will, at a minimum, include the location of CLEC's switch(es) and **SBC-13STATE**'s End Office switch(es) and/or Tandem switch(es) to be interconnected, the facilities that will connect the two networks and which Party will provide (be financially responsible for) the Interconnection facilities. At the time of implementation in a given local exchange area the plan will be documented and signed by appropriate representatives of the Parties, indicating their mutual agreement to the physical architecture plan.

2.2 Points of Interconnection (POIs): A Point of Interconnection (POI) is a point in the network where the Parties deliver Interconnection traffic to each other, and also serves as a demarcation point between the facilities that each Party is responsible to provide. In many cases, multiple POI(s) will be necessary to balance the facilities investment and provide the best technical implementation of Interconnection requirements to each Tandem within an exchange area and/or LATA. Both parties shall negotiate the architecture in each location that will seek to mutually minimize and equalize investment.

2.3 The Parties agree to meet as often as necessary to negotiate the selection of new POIs. The overall goal of POI selection will be to achieve a balance in the provision of facilities that is fair to both Parties. Criteria to be used in determining POIs for each geography (LATA, tandem area, etc.) include existing facility capacity, location of existing POIs, traffic volumes, relative costs, future capacity needs, etc. Agreement to the location of POIs is based on the network architecture existing at the time the POI(s) is/are negotiated. In the event either Party makes subsequent changes to its network architecture, including but not limited to trunking changes or adding new switches, then the Parties will negotiate new POIs. The mutually agreed to POIs will be documented and distributed to both Parties.

2.4 Each Party is responsible for the facilities to its side of the negotiated POI(s) and may utilize any method of Interconnection described in this Appendix. Each Party is responsible for the appropriate sizing, operation, and maintenance of the transport facility to the POI(s). The parties agree to provide sufficient facilities for the Interconnection trunk groups required for the exchange of traffic between CLEC and **SBC-13STATE**.

2.5 Either Party, must provide thirty (30) days written notice of any intent to change to the physical architecture plan.

2.6 CLEC is solely responsible for the facilities that carry OS/DA, 911, mass calling and Meet-Point trunk groups as specified in Appendix ITR.

2.7 If CLEC has established Collocation in an **SBC-13STATE** End Office, the facility for the Direct End Office Trunks (DEOTS) to that End Office shall be the financial responsibility of CLEC.

2.8 Technical Interfaces

2.8.1 The Interconnection facilities provided by each Party shall be formatted using either Alternative Mark Inversion (AMI) line code with Superframe format framing or Bipolar 8 Zero Signaling (B8ZS) with Extended Superframe format framing or any mutually agreeable line coding and framing.

2.8.2 Electrical handoffs at the POI(s) will be at the DS1 or DS3 level. When a DS3 handoff is agreed to by the Parties, **SBC-13STATE** will provide any multiplexing required for DS1 facilities or trunking at their end and CLEC will provide any DS1 multiplexing required for facilities or trunking at their end.

2.8.3 When the Parties demonstrate the need for Optical handoffs at the OC-n level, the parties will meet to negotiate specific Optical handoff needs.

3. METHODS OF INTERCONNECTION

3.1 Physical Collocation Interconnection

3.1.1 When CLEC provides their own facilities or uses the facilities of a 3rd party to a **SBC-13STATE** Tandem or End Office and wishes to place their own transport terminating equipment at that location, CLEC may Interconnect using the provisions of Physical Collocation as set forth in Appendix Collocation or applicable state tariff.

3.2 Virtual Collocation Interconnection

3.2.1 When CLEC provides their own facilities or uses the facilities of a 3rd party to a **SBC-13STATE** Tandem or End Office and wishes for **SBC-13STATE** to place transport terminating equipment at that location on the CLEC's behalf, they may Interconnect using the provisions of Virtual Collocation as set forth in Appendix Virtual Collocation or applicable tariff. Virtual Collocation allows CLEC to choose the equipment vendor and does not require that CLEC be Physically Collocated.

3.3 Leased Facility Interconnection ("LFI")

3.3.1 Where facilities exist, either Party may lease facilities from the other Party as defined in Section 5 of this Appendix.

3.4 Fiber Meet Interconnection

3.4.1 Fiber Meet Interconnection between **SBC-13STATE** and CLEC can occur at any mutually agreeable and technically feasible point between CLEC's premises and an **SBC-13STATE** Tandem or End Office within each local exchange area (**SBC-SWBT**) or LATA (**SBC-AMERITECH**, **SNET**, **PACIFIC**, and **NEVADA**).

3.4.2 When the Parties agree to interconnect their networks pursuant to the Fiber Meet, a single point-to-point linear chain SONET system must be utilized. Only Interconnection trunking shall be provisioned over this jointly provided facility.

3.4.3 Neither Party will be allowed to access the Data Communications Channel ("DCC") of the other Party's Fiber Optic Terminal (FOT). The Fiber Meet will be designed so that each Party may, as far as is technically feasible, independently select the transmission, multiplexing, and fiber terminating equipment to be used on its side of the POI(s). The Parties will work cooperatively to achieve equipment and vendor compatibility of the FOT equipment.

3.4.4 Requirements for such Interconnection specifications will be defined in joint engineering planning sessions between the Parties. The Parties may share the investment of the fiber as mutually agreed.

3.4.5 In addition to the semi-annual trunk forecast process, discussed in Appendix ITR, discussions to provide relief to existing facilities can be initiated by either party. Actual system augmentations will be initiated only upon mutual agreement. Facilities will be planned for to accommodate the verified and mutually agreed upon trunk forecast.

3.4.6 Both Parties will negotiate a project service date and corresponding work schedule to construct relief facilities prior to facilities exhaust.

3.4.7 There are four basic Fiber Meet design options. The option selected must be mutually agreeable to both Parties. Additional arrangements may be mutually developed and agreed to by the Parties pursuant to the requirements of this section.

3.4.7.1 Design One: CLEC's fiber cable (four fibers) and **SBC-13STATE**'s fiber cable (four fibers) will be connected at a mutually agreeable and technically feasible mid-point between CLEC and **SBC-13STATE** locations**.** This interconnection point will be at a mutually agreeable location, with the intent of a 50/50 share in the cost of the facilities. Each Parties' fiber cables will be terminated and then cross connected on a fiber termination panel. CLEC and SBC will provide t heir own fiber termination panels and will be responsible for terminating and testing their own fibers. Each Party will supply fiber optic equipment at their respective end. The POI will be at the fiber termination panel at the mid-point meet.

3.4.7.2 Design Two: CLEC will provide fiber cable to the last entrance (or **SBC-13STATE** designated) manhole at the **SBC-13STATE** Tandem or End Office switch. **SBC-13STATE** shall make all necessary preparations to receive and to allow and enable CLEC to deliver fiber optic facilities into that manhole. CLEC will provide a sufficient length

of Fiber cable for **SBC-13STATE** to pull through the **SBC-13STATE** cable vault. CLEC shall deliver and maintain such strands wholly at its own expense up to the POI. **SBC-13STATE** shall take the fiber from the manhole and terminate it inside **SBC-13STATE**'s office at the cable vault at **SBC-13STATE**'s expense. In this case the POI shall be at the **SBC-13STATE** designated manhole location.

3.4.7.3 Design Three: **SBC-13STATE** will provide fiber cable to a mutually agreed upon manhole towards the last entrance (or CLEC designated) manhole at the CLEC location. CLEC shall make all necessary preparations to receive and to allow and enable **SBC-13STATE** to deliver fiber optic facilities into that manhole. **SBC-13STATE** will provide a sufficient length of fiber cable for CLEC to pull to a mutually agreed upon point of termination **SBC-13STATE** shall deliver and maintain such strands wholly at its own expense up to the POI. CLEC shall take the fiber from the manhole and terminate it inside CLEC's office on the FDF at CLEC's expense. In this case the POI shall be at the CLEC designated manhole location.

3.4.7.4 Design Four: Both CLEC and **SBC-13STATE** each provide two fibers between their locations to terminate at each parties' FOT This design may only be considered where existing fibers are available and there is a mutual benefit to both Parties. **SBC-13STATE** will provide the fibers associated with the working side of the system. CLEC will provide the fibers associated with the protection side of the system. The Parties will work cooperatively to terminate each other's fiber in order to provision this joint point-to-point linear chain SONET system. Both Parties will work cooperatively to determine the appropriate technical handoff for purposes of demarcation and fault isolation. The POI will be defined as being at the **SBC-13STATE** location.

3.4.8 CLEC location includes FOTs, multiplexing and fiber required to terminate the optical signal provided from **SBC-13STATE**. This location is CLEC's responsibility to provision and maintain.

3.4.9 The **SBC-13STATE** location includes all **SBC-13STATE** FOT, multiplexing and fiber required to terminate the optical signal provided from CLEC. This location is **SBC-13STATE**'s responsibility to provision and maintain.

3.4.10 **SBC-13STATE** and CLEC shall, solely at their own expense, procure, install, and maintain the agreed-upon FOT equipment in each of their locations where the Parties established a Fiber Meet in capacity sufficient to provision and

maintain all trunk groups prescribed by Appendix ITR for the purposes of Interconnection.

3.4.11 Each Party shall provide its own source for the synchronized timing of its FOT equipment.

3.4.12 CLEC and **SBC-13STATE** will mutually agree on the capacity of the FOT(s) to be utilized based on equivalent DS1s or DS3s. Each Party will also agree upon the optical frequency and wavelength necessary to implement the Interconnection. The Parties will develop and agree upon methods for the capacity planning and management for these facilities, terms and conditions for over provisioning facilities, and the necessary processes to implement facilities as indicated below.

3.5 Other Interconnection Methods

3.5.1 Other Interconnection methods that are technically feasible may be mutually agreed to by the Parties.

4. RESPONSIBILITIES OF THE PARTIES

4.1 For each local Interconnection within an **SBC-13STATE** area, CLEC shall provide written notice to **SBC-13STATE** of the need to establish Interconnection in each local exchange area (**SBC-SWBT**) or LATA (**PACIFIC**, **NEVADA**, **SNET**, and **SBC-AMERITECH**). Such request will include (i) CLEC's Switch address, type of Switch and CLLI code; (ii) CLEC's requested Interconnection activation date; and (iii) a non-binding forecast of CLEC's trunking and facilities requirements.

4.2 Upon receipt of CLEC's notice to interconnect, the Parties shall schedule a meeting to negotiate and mutually agree on the network architecture (including trunking) to be documented as discussed in Section 2.1. The Interconnection activation date for an Interconnect shall be established based on then-existing force and load, the scope and complexity of the requested Interconnection and other relevant factors.

4.3 Either party may add or remove additional switches. The parties shall be entitled to provide written notice to establish such Interconnection; and the terms and conditions of this agreement will apply to such Interconnection.

4.4 The Parties recognize that a facility handoff point must be agreed to that establishes the demarcation for maintenance and provisioning responsibilities for each party on their side of the POI.

4.5 Facilities will be planned for in accordance with the trunk forecasts exchanged between the Parties as described in Appendix ITR.

5. LEASING OF FACILITIES

5.1 Should **SBC-13STATE** wish to voluntarily provide CLEC with Leased ILEC Facilities for the purpose of interconnection, the Parties agree that this voluntary offering is not required under FTA 96 nor under FCC UNE Remand Order 99-238, November 5, 1999, and is made with all rights reserved. The Parties further agree that any such voluntary offering is not subject to TELRIC cost methodologies, and instead will be market priced on an individual case basis. Should **SBC-13STATE** voluntarily offer Leased Facilities under this section, it (1) will advise the CLEC in writing in advance of the applicable charges for Leased Facilities, and (2) will process the request only if CLEC accepts such charges.

5.2 The purpose of this section is to cover both CLEC's and **SBC-SWBT**, **PACIFIC** and **NEVADA** leasing of facilities from each other for the purposes of Interconnection in **SBC-AMERITECH** and **SNET**, such leased facilities are from the applicable Access Tariff.

5.3 The Parties leasing of facilities from each other for purposes of this Appendix will be subject to mutual agreement of the Parties.

5.4 Leasing of facilities from either party for the above purposes and any future augmentations are subject to facility availability at the time of the written request.

5.5 The requesting Party will provide a written leased facility request that will specify the A- and Z-ends (CLLI codes, where known), equipment and multiplexing required and provide quantities requested. Requests for leasing of facilities for the purposes of Interconnection and any future augmentations are subject to facility availability at the time of the request. Applicable rates, terms and conditions will be determined at the time of the request.

5.6 Requests by either Party for leased facilities where facilities, equipment, or riser cable do not exist will be considered and the requesting Party may agree to provide under a Bona Fide Request (BFR) Process as defined below, unless otherwise provided out of a tariff, at the providing Party's sole discretion:

5.6.1 A BFR will be submitted by the requesting Party in writing and will include a description of the facilities needed including the quantity, size (DS1 or DS3), A- and Z-end of the facilities, equipment and multiplexing requirements, and date needed.

5.6.2 The requesting Party may cancel a BFR at any time, but will pay the requested Party any reasonable and demonstrable costs of processing and/or implementing the BFR up to the date of cancellation.

5.6.3 Within ten (10) business days of its receipt, the requested Party will acknowledge receipt of the BFR.

5.6.4 Except under extraordinary circumstances, within thirty (30) business days of its receipt of a BFR, the requested Party will provide to the requesting Party a written response to the request. The response will confirm whether the leased facilities will be offered or not. If the leased facilities will be offered, the requested Party will provide the requesting Party a BFR quote which will include the applicable recurring rates and installation intervals.

5.6.5 Within 65 calendar days of its receipt of the BFR quote, the requesting Party must confirm its order. If not confirmed within 65 calendar days, the requested Party reserves the right to modify or withdraw its BFR quote.

6. APPLICABILITY OF OTHER RATES, TERMS AND CONDITIONS

6.1 Every interconnection, service and network element provided hereunder, shall be subject to all rates, terms and conditions contained in this Agreement which are legitimately related to such interconnection, service or network element. Without limiting the general applicability of the foregoing, the following terms and conditions of the General Terms and Conditions are specifically agreed by the Parties to be legitimately related to, and to be applicable to, each interconnection, service and network element provided hereunder: definitions, interpretation, construction and severability; notice of changes; general responsibilities of the Parties; effective date, term and termination; fraud; deposits; billing and payment of charges; non-payment and procedures for disconnection; dispute resolution; audits; disclaimer of representations and warranties; limitation of liability; indemnification; remedies; intellectual property; publicity and use of trademarks or service marks; no license; confidentiality; intervening law; governing law; regulatory approval; changes in End User local exchange service provider selection; compliance and certification; law enforcement; no third party beneficiaries; disclaimer of agency; relationship of the Parties/independent contractor; subcontracting; assignment; responsibility for environmental contamination; force majeure; taxes; non-waiver; network maintenance and management; signaling; transmission of traffic to third parties; customer inquiries; expenses; conflicts of interest; survival; scope of agreement; amendments and modifications; and entire agreement.